

REMARKS

Summary of the Amendment

Upon entry of the above amendment, the specification, drawings, and claims 5, 9, 11-13, 17, 21, 23, 32, 33 and 39 will have been amended and claim 40 will have been added. Accordingly, claims 5-40 will be pending with claims 5, 33, 39 and 40 being in independent form.

Summary of the Official Action

In the instant Office Action, the Examiner neglected to list US 6,171,071 on the form PTO-892. Moreover, the Examiner objected to the drawings, rejected claims 5-32 as indefinite, and rejected claims 5-39 over the art of record. By the present amendment and remarks, Applicant submits that the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

Interview of December 7, 2004

Applicant appreciates the courtesy extended by Supervisor Tyler and Examiner Solak in the Interview of December 7, 2004. In that interview, Applicant's representative discussed, among other things, the various objections and rejections. With regard to the obviousness rejections, Applicant's representative pointed out that TZENG fails to disclose

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or suggest a pressure limiting device. Both Examiners disagreed noting that they were giving the claim language its broadest reasonable interpretation.

Applicant's representative also pointed out that there was no basis or motivation for combining the applied documents in the manner suggested by the Examiner, and that the applied documents failed to disclose or suggest a removable connection as recited in claim 33 and 39. Both Examiners disagreed noting that independent claims 33 and 39 do not specifically recite the quick connection system used in the device shown in Figs. 5-7.

Applicant's representative also pointed out that none of the applied documents disclose or suggest the motor pump shown in Fig. 1 and many of the features recited in the dependent claims. Both Examiners agreed that features shown in the figures, such as the pressure limiting device being arranged within the cylinder block, did not appear to be disclosed in the applied documents and indicated that if independent claims 5, 33 and 39 recited some of the features shown in the device of Fig. 1, they would reconsider the rejections. The Examiners also agreed that TZENG does not disclose or suggest arranging a pressure limiting device within a cylinder block.

Accordingly, while Applicant respectfully disagrees that the claims presented prior to the instant amendment do not define over the applied art of record, Applicant has nevertheless, in an effort to advance prosecution, amended the claims in manner which was indicated by the Examiner to possibly define over the applied art of record.

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The Examiner is invited to contact the undersigned upon receipt of the instant amendment to discuss the same.

Applied document not listed the PTO-892

The Examiner applied the following document but did not list it on the form PTO-892:
US 6,171,071 to TZENG et al.

Accordingly, Applicant requests that the Examiner list this document in a form PTO-892 in the next Official Action.

Objection to the Drawings, is moot

Applicant submits that the Examiner's objection to the drawings is moot in view of the instant amendment to the drawings.

By the instant Amendment, the figures have been amended as suggested by the Examiner.

In view of the above, Applicant requests that the Examiner reconsider and withdraw the objection to the drawings and indicate that the drawings are acceptable under current USPTO Rules.

Traversal of the Indefiniteness Rejection

The Examiner rejected claims 5-32 as indefinite on the basis that the claims are

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incomplete for omitting essential structural cooperative relationships of elements on the basis of MPEP Section 2172.01.

Applicant respectfully disagrees. Applicant submits that the language used to define claims 5-32 are entirely clear, supported by the specification and drawings, and consistent with current USPTO rules. The Examiner has failed to demonstrate otherwise. Contrary to the Examiner's assertions, Applicant is not required under section 112, second paragraph, to limit the invention to any particular cooperative relationship between the recited structural features.

Applicant respectfully submits that the Examiner has clearly misread MPEP 2172.01, which indicates that when it is indicated "by applicant" in the specification that certain features are essential to the invention, such features must be recited in the claims. The Examiner has identified no features which were indicated "by Applicant" to be critical to the invention and which are not recited in the claims.

Applicant has not asserted in the specification that certain devices are critical to the invention. Certainly, none of the devices listed by the Examiner have been so described and the Examiner has failed to point to any portion of the specification which supports his position that such devices are critical. Accordingly, the Examiner's apparent reliance on MPEP 2172.01 is clearly misplaced and this rejection is believed to be improper and should be withdrawn.

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Moreover, Applicant is unaware of any requirement, under either the patent statutes or rules, requiring Applicant to limit the invention to any particular or preferred disclosed embodiment. Applicant reminds the Examiner that if the claim limitations are clear and have support in the specification, they cannot be properly rejected as indefinite merely because the Examiner would prefer that the claims recite more detailed limitations.

Furthermore, the Examiner has set forth no legal basis for requiring Applicant to limit the invention. Applicant submits that the requirement that the claims be interpreted in light of the specification provides sufficient basis for the claims being definite. Finally, the Examiner is reminded that Applicant is entitled to the broadest reasonable interpretation permitted by the prior art, and that one of ordinary skill in the art, having read the specification, would understand what the claims define.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of these claims under 35 U.S.C. § 112, second paragraph.

Traversal of Rejections Under 35 U.S.C. § 103(a)

Over Tzeng and Sevrain

Applicant traverses the rejection of claims 5 and 8-12 under 35 U.S.C. § 103(a) as being unpatentable over US patent 6,171,071 to TZENG et al. in view of US patent 5,096,390 to SEVRAIN et al.

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The Examiner acknowledges that TZENG lacks, among other things, an electromagnetic motor. However, the Examiner asserted that SEVRAIN teaches this feature and that it would have been obvious to modify TZENG to include this feature.

Applicant respectfully traverses this rejection. Notwithstanding the Office Action assertions as to what these documents disclose or suggest, Applicant submits that no proper combination of these documents discloses or suggests: inter alia, a motor pump system comprising an electromagnetic motor comprising a main body, a coil, and *a movable hollow free piston*, a flow meter coupled to one end of the electromagnetic motor, a cylinder block coupled to another end of the electromagnetic motor, at least two non-return valves, a water inlet, a water outlet, and a pressure limiting device *arranged within the cylinder block*, as recited in amended independent claim 5.

As a preliminary matter, Applicant notes that the Examiner indicated in the Interview that TZENG fails to disclose or suggest a pressure limiting device arranged within the cylinder block. Accordingly, for at least this reason, Applicant submits that the instant rejection should be withdrawn.

Furthermore, while the Examiner has alleged that TZENG discloses a motor comprising a main body, a coil, and *a movable hollow free piston*, the Examiner has failed to recognize that the motor 70 is completely separated from the pistons arranged on the rod 24. Rather than being arranged within or forming part of the motor 70, the pistons are

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instead coupled to a rod 24 and are arranged within a cover 20 (see Fig. 3). Furthermore, TZENG provides for a casing 12 that is arranged between the motor 70 and the cover 20, thereby further separating the motor 70 from the cover 20 and the pistons disposed therein.

While it is apparent that the casing 12 and cover 20 are mounted to an end of the motor 70 (see Fig. 1), it is improper to characterize the disclosure of TZENG as teaching a motor comprising a main body, a coil, and a movable hollow free piston when TZENG clearly fails to disclose or suggest any pistons arranged within, forming part of, or being otherwise structurally or functionally associated with the motor 70.

Finally, while Applicant does not dispute that SEVRAIN discloses an electromagnetic motor driving a pump, it is clear from a fair reading of this document that SEVRAIN fails to disclose or suggest, in addition to, among other things *a pressure limiting device arranged within a cylinder block*, an electromagnetic motor comprising a main body, a coil, and *a movable hollow free piston*. Moreover, Applicant notes the Examiner has not identified any of these features in SEVRAIN. Applicant notes, for example, that device 32 is described in SEVRAIN as being a rotor, and not a piston.

Because neither document teaches or suggests a pressure limiting device arranged with a cylinder block, Applicant submits that no proper combination of TZENG and SEVRAIN can ever arguably render impatentable the combination of features recited in at least independent claim 5.

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Further, even assuming, *arguendo*, that it would have been obvious to modify the teachings of these documents to include the features asserted to be missing, (which Applicant submits it would not be), Applicant notes that such a modification is not based on any teachings in the applied art. In this regard, the Examiner has not identified any proper motivation to combine these documents in any manner that would render obvious Applicant's invention. Applicant reminds the Examiner of the guidelines identified in M.P.E.P section 2141 which state that "[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

As this section clearly indicates, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Moreover, it has been legally established that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art

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also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Although a prior art device ‘may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.’ 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).”

Additionally, it has been held that “[a] statement that modifications of the prior art to meet the claimed invention would have been ‘well within the ordinary skill of the art at the time the claimed invention was made’ because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).”

Thus, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify the applied references in the manner asserted by the Examiner. Nor does the Examiner’s opinion provide a proper basis for these features or for the motivation to modify these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claim 5 is not rendered obvious by any reasonable inspection and interpretation of the disclosures of the applied references.

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Further, Applicant submits that claims 8-12 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of TZENG and SEVRAIN discloses or suggests, in combination: that the pressure limiting device is a bore provided in the cylinder block and comprises a calibrated spring-loaded valve which connects the water outlet to a base of the free hollow piston as recited in claim 8; that the motor pump system is adapted to recycle water without driving the flow meter when there is back pressure at the water outlet as recited in claim 9; that the main body is one of machined in a single piece and made of plastic as recited in claim 10; that the motor pump system is adapted to couple to an automatic coffee machine as recited in claim 11; and that the motor pump system is adapted to couple to a device which requires a pressurized liquid supply from a reservoir as recited in claim 12.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection of these claims under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

Over Tzeng with Sevrain and Onoda

Applicant traverses the rejection of claims 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over TZENG and SEVRAIN and further in view of US patent 4,265,127 to

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ONODA.

The Examiner acknowledges that TZENG and SEVRAIN lack, among other things, the flow meter recited in the above-noted claims. However, the Examiner asserted that such a flow meter is taught by ONODA and that it would have been obvious to modify the asserted combined device of TZENG/SEVRAIN to include the recited features.

Applicant respectfully traverses this rejection. Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits that no proper modification or combination of the above-noted documents discloses or suggests: inter alia, a motor pump system comprising an electromagnetic motor comprising a main body, a coil, and *a movable hollow free piston*, a flow meter coupled to one end of the electromagnetic motor, a cylinder block coupled to another end of the electromagnetic motor, at least two non-return valves, a water inlet, a water outlet, and a pressure limiting device *arranged within the cylinder block*, as recited in amended independent claim 5.

In addition to the reasons identified above with regard to TZENG and SEVRAIN, Applicant notes that ONODA merely relates to a flow meter which can be arranged within a conduit. Applicant notes, for example, there is no apparent disclosure in this document with regard to motor pump system utilizing an electromagnetic motor, much less, one comprising a main body, a coil, and *a movable hollow free piston*. It is also clear from a fair reading of this document that ONODA similarly fails to disclose or suggest, among other

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things, *a pressure limiting device arranged within a cylinder block.*

While Applicant does not dispute that ONODA teaches a flow meter, Applicant does not agree that any of the applied documents discloses or suggests the motivation for using the device disclosed in ONODA on the motor pump system disclosed in TZENG and SEVRAIN. Indeed, the Examiner has failed to identify any disclosure in these documents which would support any basis for combining these documents in the manner asserted by the Examiner.

Because each of the applied documents fails to disclose or suggest at least the above-noted features of the instant invention, Applicant submits that no proper modification or combination of these documents can render unpatentable the combination of features recited in at least claim 5.

Additionally, Applicant submits that claims 6 and 7 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of TZENG, SEVRAIN, and ONODA discloses or suggests, in combination: that the flow meter comprises a free bucket wheel as recited in claim 6; and that the flow meter further comprises an electromagnetic detector and wherein the free bucket comprises at least one permanent magnet whose movement is detected by the electromagnetic detector as recited in claim 7.

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Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection of these claim under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

Over Tzeng with Sevrain and Nishijyo

Applicant traverses the rejection of claims 13-39 under 35 U.S.C. § 103(a) as being unpatentable over TZENG and Sevrain and further in view of US patent 4,124,332 to NISHIJYO.

The Examiner acknowledges that TZENG and SEVRAIN lacks, among other things, a pressure controller as described in the above-noted claims and a quick connection. However, the Examiner asserted that NISHIJYO discloses these features and that it would have been obvious to modify TZENG and SEVRAIN to include these features in view of the teachings of NISHIJYO.

Applicant respectfully traverses this rejection. Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits that no proper modification or combination of the above-noted documents discloses or suggests: inter alia, a motor pump system comprising an electromagnetic motor comprising a main body, a coil, and *a movable hollow free piston*, a flow meter coupled to one end of the electromagnetic motor, a cylinder block coupled to another end of the electromagnetic motor,

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at least two non-return valves, a water inlet, a water outlet, and a pressure limiting device *arranged within the cylinder block*, as recited in amended independent claim 5; inter alia, a motor pump system comprising a motor including a main body having an inlet end and an outlet end, *a flow meter coupled to the inlet end*, an outlet body coupled to outlet end, and *a pressure controller comprising an end piece and a fixed element which is removably coupled to the end piece via a quick connection*, wherein the fixed element is coupled to the outlet body, as recited in amended independent claim 33; and inter alia, a motor pump system comprising a motor including a main body having a first end and a second end, *a flow meter coupled to the first end and having an inlet*, an outlet body coupled to the second end and having an outlet, *a pressure controller comprising a fixed element and an end piece, the fixed element comprising a movable cylindrical shutter and an outlet which is in fluid communication with the outlet of the outlet body, and the end piece coupled to a reservoir and comprising a movable valve, wherein the fixed element is removably coupled to the end piece via a quick connection*, as recited in amended independent claim 39.

In addition to the reasons identified above with regard to TZENG and SEVRAIN, Applicant notes that NISHIJYO merely relates to a system for automatically controlling the operation of a pump. Applicant notes, for example, there is no apparent disclosure in this document with regard to motor pump system utilizing an electromagnetic motor comprising a main body, a coil, and *a movable hollow free piston*. It is also clear from a fair reading of

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this document that NISHIJYO similarly fails to disclose or suggest, among other things, *a pressure limiting device arranged within a cylinder block* that is coupled to another end of the electromagnetic motor.

Applicant also specifically disagrees that NISHIJYO discloses or suggests *a pressure controller comprising an end piece and a fixed element which is removably coupled to the end piece via a quick connection, and/or a pressure controller comprising a fixed element and an end piece, the fixed element comprising a movable cylindrical shutter and an outlet which is in fluid communication with the outlet of the outlet body, and the end piece coupled to a reservoir and comprising a movable valve, wherein the fixed element is removably coupled to the end piece via a quick connection.* In particular, Applicant respectfully disagrees that the Examiner can properly characterize a screw connection as a quick connection.

While Applicant does not dispute that NISHIJYO teaches to connect a pressure chamber wall 39 to a water regulator 20 via a screw (see Fig. 3), Applicant does not agree that any of the applied documents discloses or suggests the motivation for using the device disclosed in NISHIJYO on the motor pump system disclosed in TZENG and SEVRAIN. Indeed, the Examiner has failed to identify any disclosure in these documents which would support any basis for combining these documents in the manner asserted by the Examiner. Nor does Applicant agree that, assuming such a combination were proper, such a

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combination would disclose or suggest all of the features recited in at least claims 5, 33 and 39. Finally, Applicant submits that none of the applied documents discloses or suggests the motivation for using the device disclosed in NISHIJYO on the motor pump system disclosed in TZENG and SEVRAIN. Indeed, the Examiner has failed to identify any disclosure in these documents which would support any basis for combining these documents in the manner asserted by the Examiner.

Because each of the applied documents fails to disclose or suggest at least the above-noted features of the instant invention, Applicant submits that no proper modification or combination of these documents can render unpatentable the combination of features recited in at least claims 5, 33 and 39.

Additionally, Applicant submits that claims 13-32 and 34-38 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of TZENG, SEVRAIN and NISHIJYO discloses or suggests, in combination: that the system further comprises a pressure controller associated with the motor pump system as recited in claim 13; that the pressure controller comprises a chamber as recited in claim 14; that the chamber of the pressure controller is adapted to receive liquid flow as recited in claim 15; that the pressure controller further comprises a flexible membrane actuating an electric contact for controlling an automatic liquid supply

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system as recited in claim 16; that the pressure controller comprises an outlet orifice for communicating with the motor pump system as recited in claim 17; that the pressure controller is adapted to receive two liquid flows as recited in claim 18; that one of the two flows is directed to a chamber in the pressure controller via a central passage and wherein another of the two flows is directed to an outlet orifice via a peripheral passage as recited in claim 19; that the pressure controller comprises a fixed element and an end piece as recited in claim 20; that the fixed element is coupled to one of the motor pump system and a frame supporting the motor pump system as recited in claim 21; that the end piece is mounted to a reservoir as recited in claim 22; that the reservoir communicates with and provides a supply to the motor pump system as recited in claim 23; that the fixed element and the end piece are releasably coupled together as recited in claim 24; that the fixed element and the end piece are releasably coupled together via a quick connection as recited in claim 25; that the pressure controller has a fixed element comprising a body, a hollow piece arranged within the body, and two passages separated by the hollow piece as recited in claim 26; that the pressure controller further comprises an end piece and an axially movable bush disposed within the end piece as recited in claim 27; that the end piece further comprises a spring associated with the bush which is adapted to close a peripheral passage as recited in claim 28; that the fixed element is removably coupled to the end piece such that when the fixed element is uncoupled from the end piece, a central passage is closed by a spring actuated

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valve as recited in claim 29; that the bush is slidably disposed with the end piece and wherein the fixed element further comprises a cylindrical shutter which is slidably disposed around the hollow piece as recited in claim 30; that the cylindrical shutter is biased via spring as recited in claim 31; that the cylindrical shutter is adapted to isolate a liquid circuit communicating with the motor pump system so as to prevent a liquid remaining in the motor pump system from flowing out of the fixed element when the fixed element is uncoupled from the end piece as recited in claim 32; that the main body comprises a coil, and a movable hollow piston as recited in claim 34; that the flow meter comprises a free bucket wheel and an electromagnetic detector as recited in claim 35; that the fixed element comprises a chamber, an electric contact disposed adjacent the chamber, a spring actuated cylindrical shutter, and a hollow piece having a passage which communicates with the chamber as recited in claim 36; that the end piece comprises a spring actuated movable bush and a valve adapted to close off a central passage as recited in claim 37; and that the outlet body comprises a pressure limiting device, a cylindrical block, and at least two non-return valves disposed with the outlet body as recited in claim 38.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection of this claim under 35 U.S.C. § 103(a) and indicate that this claim is allowable.

New Claim is also Allowable

Applicant submits that the new claim 40 is also allowable over the applied art of record. Specifically, claim 40 recites features which are not disclosed or suggested by any proper combination of the applied documents, and specifically fails to disclose or suggest, among other things, an electromagnetic motor comprising a main body, a coil, and a centrally arranged movable piston having an internal passage, a flow meter coupled to a first axial end of the electromagnetic motor, a cylinder block coupled to a second axial end of the electromagnetic motor, the first and second axial ends being arranged opposite one another, two non-return valves arranged within the unit, a water inlet allowing water to enter into the unit from the first axial end, a water outlet allowing water to exit the unit from the second axial end, and a pressure limiting device arranged within the unit, wherein the unit is structured and arranged to allow water to move from the water inlet, through the internal passage of the centrally arranged movable piston, and out through the water outlet.

Accordingly, Applicant respectfully requests consideration of this claim and further requests that the above-noted claim be indicated as being allowable.

CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the

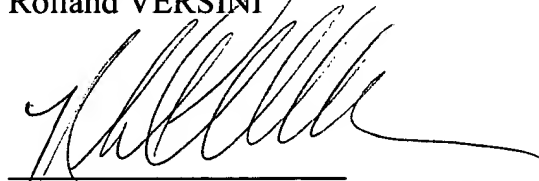
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Applicant's invention, as recited in each of the pending claims. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

The Commissioner is hereby authorized to refund excess payments and charge any additional fee necessary to have this paper entered to Deposit Account No. 19-0089.

Respectfully submitted,
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AMENDMENTS TO THE DRAWINGS

Please replace the two drawing sheets showing Figs. 1-7 with the attached two Replacement Sheet drawing sheets showing Figs. 1-7. Applicant submits that no new matter has been added in the attached Replacement Sheet drawing sheets.

In the attached Replacement Sheet drawing sheets, the following amendments have been made to the figures:

Fig. 1 has been amended to replace designations “F1” with “II”.

Fig. 2 has been amended to include the legend “II-II”.

Fig. 3 has been amended to replace designations “F2” with “IV”.

Fig. 4 has been amended to include the legend “IV-IV”.